

AD657630

GROUP EFFECTIVENESS RESEARCH LABORATORY

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

Quarterly Report

July 31, 1967

Communication, Cooperation, and Negotiation

In Culturally Heterogeneous Groups

Report of Progress under Contract ARPA No. 454

Project Code 2870, Nonr 1834(36)

with the

Advanced Research Projects Agency

DDC
REF ID: A657630
SEP 6 1967
E 20

Fred E. Fiedler, Lawrence M. Stolzow, and Harry C. Triandis

Principal Investigators

Reproduced by the
CLEARINGHOUSE
for Federal Scientific & Technical
Information Springfield Va 22151

This document has been approved
for public release and sale; its
distribution is unlimited.

Quarterly Report

July 31, 1967

This project seeks to identify culturally critical concepts and behaviors which are likely to affect interpersonal relations and task performance in culturally heterogeneous groups. Work under this project is now in its fourth year. In this time Subproject I (Triandis) developed several techniques for identifying cultural differences in interpersonal behaviors. These include the Role Differential and the Behavioral Differential by Triandis, and Semantic Feature analysis by Osgood. These three techniques measure the ways individuals from different cultures perceive and interpret interpersonal behaviors. This information is then incorporated into culture training programs.

Subproject II (Stolurow) has developed a programmed self-instructional training system (the Culture Assimilator), which has been utilized successfully in a number of laboratory and field investigations.

Subproject III (Fiedler) has continued work on a theory of leadership effectiveness (the Contingency Model), a theory which now enables us to predict group and organizational performance and which provides a rationale for modifying the group structure, the task, and group composition to increase performance in heterocultural situations.

In addition to numerous laboratory and methodological studies (see list of technical reports) we are currently conducting field research in Greece, Iran and Honduras, and have completed field research in Belgium and Greece.

Dr. Stolzow moved to the Harvard Computing Center last September and Subproject II has been administratively absorbed by Subprojects I and III. (Research related to this subproject is not reported in detail here, although it is being continued under the supervision of Fiedler and Triandis in consultation with Stolzow.)

Professors Triandis and Fiedler have been invited to present reports of our research at the forthcoming NATO conference on "Manpower Research and the Defence Context," London, August 14 to August 18, 1967. The session devoted to our research program will be chaired by Dr. Luigi Petrullo, Director of the Psychological Sciences Division of the Office of Naval Research. Professor Pieter Drenth of the Free University of Amsterdam, and Dr. Urgiste Bouvier, the director of the Center for Social Studies of the Belgian Ministry of Defense have agreed to serve as discussants.

SUBPROJECT I

1. The current focus of Subproject I is on the integration of the findings of the last four years and their utilization in culture assimilators. This integration is now under way with the Greek data. A draft of an essay on Greek national character is now available. Triandis is in Greece working with Vassiliou on a version of this draft. This essay can become the basis for a Greek culture assimilator if the political conditions in that country allow the continuation of our research program in Athens. The decision on whether to continue will be taken in August, after discussions with American and Greek collaborators in Athens in July and August.

2. An exploration of cognitive reorganization associated with culture assimilator training is under way by Triandis and Summers in connection with the Honduras project. The data are now being collected.

3. The work mentioned in the previous quarterly report (pp. 6-9) is being continued. The Oncken study (p. 6) is being tabulated and will be analyzed soon. The Summers, Stewart, and Oncken study (p. 7) has been analyzed. In the Summers et al. study, a foreign policy decision-making task was given to American and Arab dyads. Ss were paired so as to assess the effects of (a) cultural homogeneity (American-American) vs. heterogeneity (Arab-American), and (b) cognitive similarity (same beliefs regarding American foreign policy) vs. cognitive dissimilarity (opposed beliefs) upon conflict resolution. The major results from a total of 56 pairs of Ss can be summarized as follows:

- a. Cognitive similarity vs. dissimilarity was a significant determinant of both conflict and subsequent compromise; i.e., dissimilar pairs experienced more conflict and compromised more than did the similar pairs. (Who, of course, did not need to compromise to the same extent.)
- b. In the heterocultural dyads, Arabs compromised significantly less than did their American counterparts only when the Ss held similar beliefs; when the Americans and the Arabs held widely discrepant beliefs, there was no difference between Arab and American compromise.
- c. The Arabs and the Americans paired with other Americans responded to initial differences in judgment (conflict) in the same way; i.e., their compromise was a positive function of initial differences. Moreover, these Ss tended to compromise a constant proportion of the distance separating their judgments from those of the other participant. In contrast, the Americans paired with Arabs responded to conflict in a markedly different way. These Ss tended not to compromise a constant proportion of the distance separating initial judgments. Rather, the proportional compromise varied as a function of the initial difference in judgments; furthermore, this function was negative.
- d. Belief change (regarding foreign policy) was apparently mediated by public compromise in the conflict situation. In all conditions, compromise is highly correlated with

subsequent belief change. The implications of these findings for heterocultural negotiation will be dealt with in a technical report which is now in preparation.

4. The Antecedent/Consequent study of cultural influences on cognition has now been analyzed. The design of this study and some of the major results obtained are summarized below.

Twenty abstract concepts (e.g., ANGER, WEALTH) were the starting point of the study. In Phase I, Ss in four cultures (America, Greece, India, and Japan) filled in sentences of the form "If you have..., then you have ANGER." Such sentences provided the antecedents of ANGER, as given by four cultures. The Ss also filled in sentences of the form "If you have ANGER, then you have..." These sentences provided the consequents of ANGER.

In Phase II, a questionnaire was administered to 360 Ss in each of the four cultures. The questionnaire items had the basic format of the two kinds of sentences mentioned above, but in this phase the Ss gave their answers by choosing from a list of five antecedents (or consequents) the one which they considered "to fit best." The five antecedents (or consequents) for each item were chosen by the investigators so that one was culture common (i.e., in Phase I it had a high frequency in only one culture). Each of the 20 concepts was paired with 30 antecedents and 30 consequents. The orders, contexts, etc., of the items and the antecedent or consequent elements were counterbalanced.

The output of these data consists of the frequencies of choice of the 30 antecedents to each of the 20 concepts. There are 600 frequencies in each of four cultures, or a total of 2400 frequencies for the antecedents; similarly, 2400 frequencies are associated with the consequents of

the 20 concepts. The analysis considers whether in each culture a particular frequency is abnormally high (as determined by chi-square, at the $p > .01$ level) or abnormally low (again at the $p > .01$ level). We then prepare 40 tables (20 concepts times 2, one for antecedents and one for consequents) such as the one reproduced in Table 1.

Our results show a very large number of significant differences. With regard to "Anger" (for example), 18 of the 30 antecedents given by American Ss are either too high or too low (Table 1). Thus, these Ss had a very definite idea of "what goes-with what," at least with respect to "anger." Of particular interest are instances when the antecedents or consequents are abnormally high in one or more cultures and abnormally low in some other culture. Such a complete reversal is most unlikely to be due to chance (it has a probability of being a chance finding of only .0001). For example, in Table 1, the antecedent nickname is seen to lead to ANGER in India and in Greece (though it does not reach the $p > .01$ level), and it is seen not to lead to ANGER in America and Japan. The explanation, upon checking with our foreign colleagues, is that nicknames tend to be derogatory in Greece and India and complimentary in America and Japan. The typical nickname in Greece is some animal name, such as frog, owl, or capon, to describe someone who is too short, or too fat. Such nicknames may well lead to ANGER. Americans usually use endearing nicknames, and the Japanese use them only among very close friends.

Several other interesting findings can be seen in the Table. For example, betrayal leads to ANGER in America and Japan, but not in India. Could it be that in cultures where the ingroup is large, betrayal

Table 1: The Abnormally high and abnormally low antecedents of ANGER in four cultures.

<u>America</u>	<u>Greece</u>	<u>India</u>	<u>Japan</u>
bad temper		bad temp ^{1/2}	betrayal
betrayal			contempt
contempt			hate
hate:	injustice		injustice
injustice	insult		insult
insult	jealousy		jealousy
jealousy	quarrel		
quarrel		quarrel	
		no patience	
		ridicule	
		enemies	
		nickname	
		revenge	
			dissatisfaction
			lie
		bad manners	bad manners
		failure	failure
		fear	fear
		guilt	
		ignorance	
		lie	
		nickname	
		uneasiness	
		scolding	
		weakness	
			disobedience
			enemies
			sadness
			betrayal
			contempt
			dissatisfaction
			injustice
			jealousy
			love
			disappointment

6a.

occurs rarely and, hence, it is a source of ANGER, while in cultures with narrow ingroups it occurs frequently and people adapt to it?

Contempt is linked with ANGER in America and Japan, but not in India. A similar pattern occurs with injustice and jealousy. Could it be that the unusually unfavorable economic conditions of the low status Indians has led to an adaptation to injustice and contempt, and this has become a cultural norm that has reached even our middle-class? Dissatisfaction leads to ANGER in Japan, but does not in India. (Could it be that the Indians have adapted to "dissatisfaction")?

A lie leads to ANGER in Japan, but not in America and India. Is this a case where the concept of a "white lie" does not exist in Japan but is strong in the other two countries?

It is clear that there is much more work to be done before we can publish this method. Now that we have discovered a large number of cultural differences, we must explore the reasons. Interpretation requires discussion of the results. It is hoped that all co-investigators of this project will be at the Tehran meetings in August and that we will be able to review our findings and arrive at useful interpretations.

5. Osgood's method of semantic feature analysis has been applied in a preliminary experiment of small group behavior. The method requires the individual to say whether a sentence, such as "The father pleads with his son," is appropriate, neutral, or inappropriate. The test involves all combinations of verb and adverb phrases with 30 verbs and 30 adverbs. The subjects of this experiment were classified on the basis of semantic feature analysis and then assembled into twelve three-person groups. Four of these groups contained individuals similar

in the semantic feature patterns; four groups contained persons with different patterns, four groups ("odd man") contained two persons who were similar and one who differed from his fellow group members.

Professor Kenneth Forster has come from Australia for the purpose of working on Osgood's semantic feature analysis method, and by the end of summer it is expected that a report on feature analyses will be available.

Osgood and Ayer have developed an experimental procedure called a "semantic word game" which requires the team to place 30 interpersonal adverbs on a target of ten concentric circles so that semantically similar words are placed near one another and opposite to words whose meanings they consider opposite. The results of the preliminary study have been highly encouraging by showing that "similar" groups perform most effectively and with least conflict while the "odd man" groups performed least well and had most interpersonal conflict. Further work with this method is planned for fall. If successful, the "semantic word game" would have far-reaching implications by providing a standardized laboratory task for heteroculturally composed groups under varying leadership and different types of culture training.

SUBPROJECT III

The main effort of this subproject during the current report quarter has been devoted to the preparation of two major field studies. These studies, one in Iran and one in Honduras, involve the construction of Culture Assimilators, as well as the analysis of previously obtained data for the purpose of designing more effective training programs. In addition, work of this subproject led to the submission of two journal articles, and data collection and analyses (still in progress) of two laboratory studies. We are hoping to obtain permission to conduct a third field study in Thailand in cooperation with the ARPA field unit located in Bangkok.

1. A methodological study by Fishbein, Landy, and Hatch (Technical Report 52(67-8) explored two assumptions of the Contingency Model. These assumptions are (a) that different group-task situations require a different leader-group member interaction and (b) that these demands will covary systematically with the three dimensions of the group-task situation specified by the Contingency Model. The study utilized 141 male undergraduates who described the way the most effective leader would behave in each of eight different group-task situations. The ratings were influenced primarily by two of the three dimensions postulated by the Contingency Model, namely, the leader-member relations and the position power dimension. The study thus provides partial support for the Contingency Model.

2. A study was conducted by Ninane and Fiedler in 1964 at the European School of the Common Market Nations in Brussels. This experiment investigated the effects of group failure on the reactions of the individual member of culturally homogeneous and heterogeneous groups, and has been written up as Technical Report 51(67-7) and submitted for publication.

3. Martin Chemers and Arlene Chemers have completed a Culture Assimilator for Iran, and an investigation of its effectiveness is in its initial stages. Chemers and Professor W. K. Archer, the Director of the Tehran Research Unit, are obtaining Iranian subjects with the cooperation of the Iran-America Society. They hope to obtain American subjects from among State Department and American business personnel stationed in Iran.

4. Because the Culture Assimilator programs appear to be especially effective as training devices for improving interpersonal relations between representatives of different cultures, and because of their potential usefulness to the armed forces, we are conducting a number of methodological studies to refine and improve these programs. A technical report is in preparation in which we shall present a preliminary rationale and description of procedures for constructing a Culture Assimilator program. This report should be useful to other workers in the field, although we are not yet at the stage where a manual can be written for the wholesale preparation of these training programs. A report is being drafted by Marvi Vidmar in collaboration with L. M. Stolzow. Subsequent reports are planned which will give detailed instructions for preparing Culture Assimilators.

5. A methodological study is now under way in the context of a field investigation in Honduras. The study compares different forms of the Culture Assimilator to determine the most effective method for presenting culturally relevant material. Because we have obtained some evidence that negatively slanted episodes may be anxiety-producing, we have constructed three types of Assimilators. Specifically, one version

of the program consists of episodes and incidents in which an American experiences successful intercultural relations. A second version consists of "negative" episodes in which an American experiences unsuccessful intercultural relations. The third version consists of both types of episodes. The task performance and interpersonal relations of Ss trained with these three programs will be compared with a control group receiving no culture training.

The current Honduran study is financed in part by the Office of the Surgeon General and in part by the ARPA contract. Funds for travel and work abroad were provided by a grant of the Foundations Fund for Research in Psychiatry.

6. A study conducted in Honduras last summer provided a large amount of data on the effects of a stressful intercultural environment on performance and adjustment of teams under different leadership. The data for this study have been subjected to further analysis to determine the factors which produce good leader-member relations in intercultural environments and the effect of stress on task performance.

7. An experiment was conducted by Judith Goodrich Ayer at the Chanute Air Force Base, Rantoul, Illinois. The study was carried out in the context of an instructor training program. During one session of this program, the instructor was suddenly placed under experimentally induced stress by having the officer in charge come into the room, and make either encouraging, or disapproving gestures. All sessions were tape recorded, and an analysis of the tapes is now in progress. It is hoped that this study will throw light on the effect of stress on leadership behavior of task-oriented and relationship-oriented individuals.

This study is an experimental sequel to studies conducted by Meuwese and Fiedler (1964) and by Fiedler (1966) in the Belgian navy.

8. In view of the important role the Group Atmosphere variable has played in our research, we are conducting a number of laboratory experiments to determine some of the factors underlying variations in group atmosphere. Also under consideration are the effects of different task structures on leadership performance. One such study is now being conducted by Gordon O'Brien and Daniel Ilgen. Groups are given different task structures (e.g., tasks which must be carried out simultaneously versus tasks which need to be carried out sequentially). Data collection on 72 groups are now being analyzed.

PROFESSIONAL PERSONNEL
(Contract Nonr 1834(36))

Personnel Supported by Contract

Ayer (Goodrich), Judith	Research Assistant	25%
Biglan, Tony	Research Assistant	50%
Dachler, Hans	Research Assistant	50%
Hornik, John	Research Assistant	50%
Ilgen, Daniel	Research Assistant	50%
Kilty, Keith	Research Assistant	hourly
Martin, Meredith	Research Assistant	50%
McGuire, Howard	Research Assistant	hourly
O'Brien, Gordon	Assistant Professor	67%
Oncken, Jerry	Research Assistant	50%
Stewart, Thomas	Research Assistant	50%
Summers, David	Assistant Professor	67%
Symonds, John	Research Assistant	50%

Nonsalaried Personnel Working on ARPA Project or Related Research

Bates, Peter	NSF Fellow
Chemers, Martin	NSF Fellow
Fiedler, Fred	Professor
Fishbein, Martin	Associate Professor
Osgood, Charles	Professor
Nealey, Stanley	Assistant Professor
Stolzow, Lawrence	Professor
Tsiandis, Harry	Professor
Wilkins, Marilyn	Postdoctoral Research Fellow

Foreign Consultants

Archer, W.	Tehran
Parisi, D.	Italy
Vassiliou, V. (M. Nassiakou) (M. Diamandopola)	Greece

ONR TECHNICAL REPORTS AND PUBLICATIONS

Fiedler, F. E., Bass, A. R., & Fiedler, Judith M. The leader's perception of co-workers, group climate, and group creativity: A cross-validation. Technical Report No. 1, May, 1961.

Bass, A. R., Hatton, G., & McHale, T. J. Originality, intelligence, and performance on problem-solving tasks: A pilot study of their relationship. Technical Report No. 2, April, 1962.

McHale, T. J., & Stolzow, L. M. Concept formation with metrically Multi-valued clues and response categories. Technical Report No. 3, April, 1962.

Fiedler, F. E. & Meuwese, W. A. T. The leader's contribution to performance in cohesive and uncohesive task groups. Technical Report No. 4, April, 1962. Also in J. abn. soc. Psychol., 1963, 67, 83-87.

Triandis, H. C., Mikesell, Eleanor H., & Ewen, R. B. Some cognitive factors affecting group creativity. Technical Report No. 5, May, 1962. Also in Human Relations, 1965, 15, 33-55.

Triandis, H. C., Bass, A. R., Ewen, R. B., & Mikesell, Eleanor H. Team creativity as a function of the creativity of the members. Technical Report No. 6, April, 1962. Also in J. appl. Psychol., 1963, 47, 104-110.

Anderson, L. R. & Fiedler, F. E. The effect of participatory and supervisory leadership on group creativity. Technical Report No. 7, November, 1962. Also in J. appl. Psychol., 1964, 48, 227-236.

Triandis, H. C., Mikesell, Eleanor H., & Ewen, R. B. Task set and attitudinal heterogeneity as determinants of dyadic creativity. Technical Report No. 8, November, 1962. Also in Human Relations, 1965, 18, 33-55.

Hatton, G. I. Two-choice conditional probability learning with meaningful and non-meaningful stimuli. Technical Report No. 9, October, 1962.

Fiedler, F. E. A Contingency Model of leadership effectiveness. Technical Report No. 10, July, 1963. Also in L. Berkowitz (Ed.), Advances in experimental social psychology, 1964, Vol. 1, 149-190.

Fraser, L. The effect of social reinforcers in a programmed learning task. Technical Report No. 11, September, 1963.

Triandis, H. C. The influence of culture on cognitive processes. Technical Report No. 12, October, 1963. Also in L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 1. New York: Academic Press, 1964.

Bereiter, C. Curricular and specific transfer to problem solving ability. Technical Report No. 13, October, 1963.

Morris, C. G. & Fiedler, F. E. Application of a new system of interaction analysis to the relationships between leader attitudes and behavior in problem-solving groups. Technical Report No. 14, March, 1964.

Triandis, H. C., Fishbein, M., & Hall, Eleanor R. Person perception among American and Indian students. Technical Report No. 15, June, 1964.

Triandis, H. C. & Hall, Eleanor R. Creative problem solving in culturally heterogeneous groups. Technical Report No. 16, June, 1964.

Forster, K. I., Triandis, H. C., & Osgood, C. E. An analysis of the use of the method of triads in research on the measurement of meaning. Technical Report No. 17, June, 1964.

Anderson, L. R. Some effects of leadership training on intercultural discussion groups. Technical Report No. 18, June, 1964.

Katz, Evelyn W. A content-analytic method for studying interpersonal behavior. Technical Report No. 19, October, 1964.

Katz, Evelyn W. A study of verbal and nonverbal behaviors associated with social roles. Technical Report No. 20, October, 1964.

Fishbein, M., Landy, Eva, & Hatch, Grace. Some determinants of an individual's esteem for his least preferred co-workers: An attitudinal analysis. Technical Report No. 21, February, 1965.

Meuwese, W. A. T. & Fiedler, F. E. Leadership and group creativity under varying conditions of stress. Technical Report No. 22, March, 1965.

Hackman, J. R. & Jones, L. E. Development of a set of dimensions for analyzing verbal group products. Technical Report No. 23, July, 1965.

Hackman, J. R. Tests, questionnaires and tasks of the Group Effectiveness Research Laboratory: 1951-1964. Technical Report No. 24, July, 1965.

Fiedler, F. E. The effect of cultural heterogeneity, leader power, and leader attitudes on group performance: A test of the Contingency Model. Technical Report No. 25, August, 1965. Also in Journal of Experimental Social Psychology, Vol. 2, No. 3, 1966, 237-264.

Davis, E. E. & Triandis, H. C. An exploratory study of inter-cultural negotiation. Technical Report No. 26, October, 1965. Also in J. person. soc. Psychology, 1965, 2, 715-725.

Parisi, D. Social reinforcement performance in programmed learning in Italy. Technical Report No. 27, September, 1965.

Triandis, H. C. & Davis, E. E. Some methodological problems concerning research on negotiations between monolinguals. Technical Report No. 28, December, 1965.

Fiedler, F. E. & Meuwese, W. A. T. The effect of stress on the contribution of member intelligence to group creativity. Technical Report No. 29, January, 1966.

Anderson, L. R. Initiation of structure, consideration, and task performance in intercultural discussion groups. Technical Report No. 30, April, 1966.

Chemers, M. M., Fiedler, F. F., Lekhyananda, D., & Stolurow, L. M. Some effects of cultural training on leadership in heterocultural task groups. Technical Report No. 31, April, 1966. Also in International Journal of Psychology, 1966, 1, 301-314.

Davis, E. A methodological study of behavioral and semantic differential scales relevant to intercultural negotiations. Technical Report No. 32, June, 1966.

Fiedler, F. E. A review of research on ASo and LPC scores as measures of leadership style. Technical Report No. 33, May, 1966.

Triandis, H. C., Shanmugam, A. V., & Tanaka, Y. Interpersonal attitudes among American, Indian, and Japanese students. Technical Report No. 34, July, 1966.

Triandis, H. C. Toward an analysis of the components of interpersonal attitudes. Technical Report No. 35, July, 1966.

Davis, E. E. & Grobstein, Nadine. Multiple factor analysis of interpersonal perception. Technical Report No. 36, December, 1966.

Triandis, H. C., Vassiliou, Vasso, & Thomanek, E. K. Social status as a determinant of respect and friendship acceptance. Technical Report No. 37, August, 1966. Also in Sociometry, December, 1966.

Naidoo, Josephine C. An inquiry into the structure of attitudes and behavior: A validation study. Technical Report No. 38, August, 1966.

Osgood, C. E. Speculation on the structure of interpersonal intentions. Technical Report No. 39, September, 1966.

Parisi, D. Italian word association norms. Technical Report No. 40, July, 1966.

Parisi, D., Cappelli, U., & Stolurow, L. M. Contextural predictability and frequency factors. Technical Report No. 41, August, 1966.

Stolurow, L. M. & Santhai, Suthita (with assistance of Koopman, Ray). Critical incidents with heterocultural interactions. Technical Report No. 42, November, 1966.

Triandis, H. C., & Vassiliou, Vasso. Frequency of contact and stereotyping. Technical Report No. 43, October, 1966.

Fiedler, F. E. Leadership style and the performance of coacting groups. Technical Report No. 44, October, 1966.

Triandis, H. C., Vassiliou, Vasso, & Nassiakou, Maria. Some cross-cultural studies of subjective culture. Technical Report No. 45 (67-1), January, 1967.

O'Brien, Gordon. Methods of analyzing group tasks. Technical Report No. 46 (67-2), January, 1967.

Hunt, J. G. A test of the leadership contingency model in three organizations. Technical Report No. 47 (67-3), January, 1967.

Nealey, S. M., & Blood, M. Leadership performance of nursing supervisors at two organizational levels. Technical Report No. 48 (67-4), January, 1967.

Triandis, H. C., Vassiliou, Vaso, & Nassiakou, Maria. Some cultural differences in the perception of social behavior. Technical Report No. 49 (67-5), February, 1967.

Triandis, H. C., Tucker, L. R., Koo, Ping, and Stewart, T. Three-mode factor analysis of the behavioral component of interpersonal attitudes. Technical Report No. 50 (67-6), February, 1967.

Ninane, Paul, & Fiedler, Fred E. Member reactions to success and failure of task groups. Technical Report 51 (67-7), May, 1967.

Fishbeir, M., Landy, Eva, & Hatch, Grace. Consideration of two assumptions underlying Fiedler's contingency model for the prediction of leadership effectiveness. Technical Report 52 (67-8), May, 1967.

Nayar, E.S.K., Touzard, Hubert, & Summers, David. Training, tasks and mediator orientation in heterocultural negotiations. Technical Report No. 54 (67-10), May, 1967. Also submitted for journal publication.

Other Publications, ONR supported or related.

Fiedler, F. E. A theory of leadership effectiveness. New York: McGraw Hill, 1967. In press.

Hackman, J. R., Jones, L. J., & McGrath, Joseph E. A set of dimensions for describing the general properties of group-generated written passages. Psychological Bulletin, 1967, 67, 379-390.

Hunt, J. G. Fiedler's leadership contingency model: An empirical test in three organizations. Organizational Behavioral and Human Performance. In press.

Hunt, J. G. Leadership in organizations: Some new directions in research. In A. Filley (Ed.), Proceedings of the Tenth Annual Midwest Academy of Management Meeting. Carbondale, Illinois: Bureau of Business Research, Southern Illinois University. In press.

Hunt, J. G. Another look at human relations training. Training and Development Journal. In Press.

Hunt, J. G. A breakthrough in leadership research. Personnel Administration. In press.

Triandis, H. C., & Vassiliou, Vassos. Frequency of contact and stereotyping. Technical Report No. 43, October, 1966. Also submitted for journal publication.